## PHYTOGEOGRAPHICAL MAP OF ANGOLA

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This work consists chiefly of a phytogeographic map of Angola and on descriptive memoir in which the vegetation is analysed and interpreted.

Before the vegetation is described, some general matters are discussed, particularly the different schools of thought and their nomenclatures, which have been developed in countries where the study of vegetation has a long history. A justification for the methods used in the present work is given, and the "Toulouse" system of colours is discussed.

In this work use has been made of important earlier works especially the "Carta Fitogeografica de Angola" by J. Gossweiler and F. A. Mendonca and the pioner observation of F. Welwitsch, but wherever possible more recent observations, kindly contributed by others and, especially our own observations have been used.

The present work attempts to describe the advances in our knowledge since the great pioneer effort of Gossweiler & Mendonca. More work is certainly necessary but there is an urgent need to make recent advances in

knowledge generally available.

I have made great efforts to understand the dominant genera and families Brachystegia, Iulbernardia and Combretaceae, which were very poorly known 30 years ago, and have received much help from the specialists A. C. HOYLE and A. W. Exell. Because the various Brachystegia species cover more than one million square kilometers of Angola, I have made a special study of them during the last fifteen years. Notwithstanding the small scale of the map it should be of interest to specialists in forestry, agriculture, medicine, veterinary science etc., but it should be emphasized that much work still remains to be done.

In the original Carta Fitogeográfica de Angola 19 principal vegetation types are recognized, each with its own colour and 26 subordinate types are designed by symbols. In the present work there are 32 main types, and more than 100 subordinate types are dealt with in the text. For economic reasons only the main types can be shown on the map and I hope that they will be useful to those who know Angola but are not necessarily botanists.

Great care has been taken with the colour system. The solar spectrum passing successively through red, yellow, green and blue is followed. Red is used for extreme aridity and violet for extreme humidity.

A physiognomic classification modified from that proposed by the

Yangambi conference has been adopted. The vegetation types are reproducted by a special system of symbols, in which the closeness of the hatching corresponds to the density of the vegetation. Since the same system has been used for the flora Zambesiaca map, it is now possible to relate the vegetation of Angola to that of the remainder of the Zambesion Domain.

This work is independent but at the same time complimentary to the other carried out for the area of the "Flora Zambesiaca" by H. WILD and GRANDVAUX BARBOSA with the collaboration of DE BEER and B. STEELE (1967).